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Yoshiyuki Nagaoka

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EXAMINER

ADDIE, RAYMOND W

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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***Response to Arguments***

1. Applicant's arguments filed 11/19/2008 have been fully considered but they are not persuasive.

Applicant argues in favor of withdrawing finality of the Last Office Action, based on the Examiner's indication of a new grounds of rejection.

However, the finality of the Last Office Action is proper because all of the rejections cited in the non-final rejection of 4/17/2008 have been repeated.

The fact the Examiner included additional grounds of rejection does not justify a non-final rejection nor withdrawing finality of the Last Office Action.

Therefore, the finality of the last rejection appears proper and is maintained.

Applicant then argues against the rejection of claims 1, 2, 4-6, 8 by suggesting "Applicant asserted in its June 9, 2008 response, Poole does not describe temporary pavement markings...specifically teaches away from temporary pavement markings...because Poole specifically teaches away from temporary pavement markings, the Examiner has failed to adequately show a motivation to combine Poole with Boeing and/or Sawtelle".

Applicant supports the argument of Poole teaching away from temporary markings by repeating the citation from Poole that "the final marking...adheres permanently to the surface on which it is deposited", and cites Col. 4, Ins. 33-34, 60-64; Col. 2, Ins. 56-57 and Col. 6, Ins. 14-16. Applicant further cites the disclosure of Poole as pointing to a problem in the prior art, that "the markings will wear off easily".

In response to applicant's argument that Poole teaches away from the claimed invention because Poole's marking material is intended to be permanent, and Applicant's marking material is intended to be temporary is not persuasive because, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

With respect to claims 1, 5 nothing in the body of the claims cites, recites nor requires any structural feature that makes the marking material temporary.

Further, it is well known any marking material, applied as a liquid or semi-solid, can be made temporary by known removal methods such as by grinding.

Therefore, the argument is not persuasive and the rejection is maintained.

Also, In response to applicant's arguments, the recitation "A temporary marking material" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

2. In response to applicant's argument that Boeing is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention.

See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Boeing explicitly recites the use of a gas containing, thermally expansive microballs that "pop" when heated thereby making the paint on the surface to be peelable from the surface of the structure. Boeing explicitly teaches the microballs are effective in removing "sprayed temporary protective coating", such as paint. It is noted most sprayable roadway markings are or include "paint".

Therefore, Applicant's suggestion that Boeing is non-analogous art, simply because Boeing tested the material on indoor grates; is not persuasive because the reference to Boeing is specifically directed to the problem Applicant attempts to solve, which is to remove paint from the surface of a structure, by use of thermally expansive microballs. Applicant's argument that Boeing teaches heating the microballs by placement in hot water or an oven, is irrelevant since none of the claims are drawn or directed to the method by which the microballs are heated. There are no method claims pending.

Applicant argues with respect to the activation temperature of the Boeing microballs and that of the claimed invention by suggesting "the microballs of Boeing must be heated to at least 195F...In contrast, the present application describes microballs that are heated

to between 80F and about 150F...and specifically states that for temperatures higher than 150F, gas can be generated, which may be dangerous".

However, Applicant representation of his/her Specification is understated. Applicant's amendment to the Specification filed 12/07/2007 explicitly recites "the temporary marking material preferably becomes easily peelable after it is heated to a temperature of usually 80-200C or (176-392F). Far in excess of the temperatures argued by Applicant.

Thus it appears by Applicant's own admission, the temporary marking material is unsuitable for use in roadways, because as argued by Applicant "temperatures higher than 150F...which may be dangerous", and Applicant readily discloses heating the claimed marking material "usually at least 80C(176F).

The fact Applicant admits the claimed invention can be caused to be activated at temperatures as low as 80 degrees F; also shows the material is unsuitable for use as a roadway marker, since most if not all roadways in the continental US reach surface temperatures above 80F between April and October, for at least a portion of the day, which would likely cause the low-temp. microballs of the claimed invention to expand and de-bond the marking material from a roadway unexpectedly, making the marking material "too temporary" for use in roadways, or on roadway barriers and signs.

Therefore, the argument is not persuasive and the rejection is maintained. Hence, Applicant's suggestion that the Examiner improperly failed to consider applicant's rebuttal evidence is contested by the Examiner, because as put forth above,

the independent claims do not connect any feature in the body of the claim to the preamble of the claim, showing a structural difference that makes the marking material temporary. Hence, the argument that Poole teaches away from a temporary marking material is not persuasive.

Applicant argues in favor of claims 2-8 that "add additional features to claim 1 and should also be allowable".

However, Claims 6-8 depend from claim 5. Further, since Applicant does not cite any feature that patentably distinguishes the dependent claims 2-4, 6, 7 from the teachings of the prior art, the rejection of claims 2-4, 6, 7 also appear to be proper and are maintained.

Applicant then argues against the rejection of claims 1, 2, 4-6, 8 as being unpatentable over Wallgren et al. in view of Boeing(as put forth above) and Matsumoto my stating "the Examiner has failed to show any motivation to combine the microballs of Boeing with the temporary pavement markings of Wallgren...Boeing is non-analogous art".

However, the Examiner does not concur.

The fact Boeing uses heat activated microballs to remove paint from a substrate, in a known manner makes the Boeing reference analogous to the problem Applicant is trying to solve, which is to make a roadway marking i.e. paint stripes, removable by heat activating polymer microballs to disassociate the paint layer from the substrate.

Further, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Wallgren et al. clearly and unavoidably discloses that roadway marking materials can be used in a temporary capacity for use temporary traffic diversions, the marking material comprising a thermally expansive layer (2) comprising a binder, a pigment (9), a layer of transparent beads, for reflectivity of vehicle headlights. Wherein the marking material (A) is adhered to a surface by virtue of the binder in the thermally-expansive layer. See Para. [0044-0050]; Abstract.

As readily admitted by Applicant; Wallgren et al. discloses "the product can be removed from the receiving surface before the marking has become worn (a typical reason for removing temporary and permanent roadway marking materials)...This product is preferably used for traffic diversions and similar areas". Hence, Wallgren et al. gives at least 2 separate reasons for removing a roadway marking material. What Wallgren et al. does not disclose is how the marking material can be removed from the roadway. However, as put forth above, Boeing teaches it is known to use heat activated microballs to remove a marking material, such as paint, from a substrate.

Hence, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use heat activated microballs as taught by Boeing to remove the marking material of Wallgren et al., since doing so is known, and one of skill in the art, would expect a high degree of success when combining the two teachings of the prior art.

Applicant then argues in favor of claims 2-8 as being dependent upon claim 1. However, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Therefore, the arguments are not persuasive and the rejection is maintained.

**Note to Applicant:**

Claims 1 and 5 have been mentioned for their lack of connecting the intended use cited in the preamble of each claim, with some feature in the body of the claims that makes, facilitates or causes the marking material to be "temporary".

Because claims 2 and 6 do provide such a connection between the preamble and the bodies of the independent claims 1, 5 inclusion of the limitations of claims 2, 6 into the independent claims 1, 5 would correct the "omission" in the independent claims.

Thus narrowing the issues for Appeal.



***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond W. Addie whose telephone number is 571 272-6986. The examiner can normally be reached on 7am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Raymond W. Addie/  
Primary Examiner, Art Unit 3671

12/1/2008